

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE APPLICATION OF THE)	
FUEL ADJUSTMENT CLAUSE OF LOUISVILLE)	CASE NO. 10440
GAS AND ELECTRIC COMPANY FROM NOVEMBER 1,)	
1986 TO OCTOBER 31, 1988)	

O R D E R

Pursuant to Commission Regulation 807 KAR 5:056, the Commission on December 5, 1988 established this case to review and evaluate the operation of the fuel adjustment clause of Louisville Gas and Electric Company ("LG&E") for the 2 years ended October 31, 1988, and to determine the amount of fuel cost that should be transferred (rolled-in) to its base rates to reestablish its fuel adjustment clause charge.

The Attorney General ("AG"), through his Utility and Rate Intervention Division, was the only intervenor in this case. The AG did not present any witnesses, perform any cross-examination, or challenge any evidence or proposals presented by LG&E.

As part of its review, the Commission ordered LG&E to submit certain information concerning, inter alia, its fuel procurement, its fuel usage and the operation of its fuel adjustment clause. LG&E submitted this information on December 21, 1988. A public hearing was held in this case on February 9, 1989, at which John Hart, Lee Fowler, James Nelson and Kevin Cardwell, LG&E officials, testified.

LG&E proposed that the month of August 1988 be used by the Commission as the base period (test month) for the purpose of arriving at the base fuel cost [F(b)] and the KWH sales [S(b)] components of its fuel adjustment clause. It further proposed that its base fuel cost be changed to 14.22 mills per KWH, the actual fuel cost for the proposed base period. LG&E's current base fuel cost is 15.11 mills per KWH.

In establishing the appropriate level of base fuel cost to be included in LG&E's rates, the Commission must determine whether the proposed base period fuel cost per KWH is representative of the level of fuel cost currently being experienced by LG&E. The Commission's review of generation mix, generation unit outages, and generation unit availability discloses that the month of August 1988 is a reasonably representative generation month for LG&E. Our analysis of LG&E's monthly fuel clause filings shows that the actual fuel cost incurred for the 2-year period in question ranges from a low of 13.53 mills per KWH in October 1988 to a high of 14.53 mills per KWH in April 1987 with an average cost for the period of 13.99 mills per KWH. Based upon this review, the Commission is of the opinion that LG&E has complied with Commission Regulation 807 KAR 5:056 and that the proposed base period fuel cost of 14.22 mills per KWH should be approved.

In implementing a new base period fuel cost, the Commission recognizes that the potential for underrecovery of fuel costs exists. LG&E bills its customers on a daily cycle basis. Customers are billed only after service is received. The average LG&E customer has a billing period which straddles 2 calendar

months. As a result, his monthly bill is partially for usage in the current calendar month and partially for usage in the prior calendar month. As the change in the base period fuel cost will occur during the billing period, not at its beginning, LG&E faces the prospect of assessing its customers a fuel adjustment charge based on an incorrect base period fuel cost for a portion of the billing period.

This problem is compounded by the lag in billing customers for the fuel adjustment clause rate. Each customer incurs a fuel adjustment clause charge with every billing period. Because of the time required to calculate the precise charge for that billing period, however, the charge incurred is not actually billed until two billing periods later.¹

The Commission has faced this problem in prior cases,² and has found that, while no precise solution exists, a reasonable solution is to average the base period fuel cost prior to and

¹ Consider the following example: The new base period fuel cost is established as 14.22 mills per KWH effective for service rendered on and after July 1, 1989. The actual fuel costs for May and June 1989 are 14.19 and 15.19 mills per KWH respectively. Since half of May sales are billed in May and the other half is billed in June, the base fuel cost of 15.11 mills per KWH would apply to both months. Thus the applicable fuel adjustment charge for May would be <0.92> mills per KWH (14.19 - 15.11) and would be recoverable from customers beginning with the first cycle billed July 1989. The recovery of June fuel costs would not be as easily computed since that half of the sales billed in June would be subject to the old base fuel cost of 15.11 mills per KWH and the other half would be subject to the new base fuel cost of 14.22 mills per KWH.

² See, e.g., Case No. 8056, An Examination By the Public Service Commission of the Application of the Fuel Adjustment Clause of Louisville Gas and Electric Company Pursuant to 807 KAR 5:056E, Sections 1(11) and (12).

after roll-in in computing the fuel adjustment charge for the billing period in which the new base period fuel cost (after roll-in) becomes effective.³ The use of this procedure in the case at bar, the Commission believes, will eliminate any material impact on LG&E and its customers from the roll-in of the fuel cost to base rates.

The Commission, having considered the evidence of record and being advised, finds that:

1. LG&E has complied in all material respects with the provisions of 807 KAR 5:056.

2. The test month of August 1988 should be used as LG&E's base period for this review.

3. LG&E's proposed base period fuel cost of 14.22 mills per KWH should be approved.

4. The establishment of a base fuel cost of 14.22 mills per KWH requires a transfer (roll-in) of <.89> mills per KWH from the fuel adjustment clause rate to LG&E's base rates and can best be accomplished by an energy adder to each KWH sold.

5. The rates and charges in Appendix A reflect the transfer (roll-in) to base rates of the differential between the current

³ Applying this method to the example presented in note 1, the base fuel cost for June would be the average of the base fuel cost after roll-in of 14.22 mills per KWH and the base fuel cost before roll-in of 15.11, or 14.67. Thus the fuel adjustment charge for June would be .52 mills per KWH (15.19 - 14.67) and would be recovered from the customers beginning with the first cycle billed in August.

base fuel cost of 15.11 mills per KWH and the proposed fuel cost of 14.22 mills per KWH.

6. The rates in Appendix A, attached and incorporated hereto, are fair, just, and reasonable and should be approved for service rendered on and after July 1, 1989.

7. The fuel adjustment clause rate for May 1989, which will be billed in July 1989, should be computed using the base fuel cost prior to roll-in of 15.11 mills per KWH.

8. The fuel adjustment clause rate for June 1989, which will be billed in August 1989, should be computed using a base fuel cost of 14.67 mills per KWH, the average of the base fuel costs prior to and after roll-in.

9. The fuel adjustment clause rate for July 1989 and succeeding months should be computed using the base fuel cost of 14.22 mills per KWH.

IT IS THEREFORE ORDERED that:

1. The charges collected by LG&E through the fuel adjustment clause for the period November 1, 1986 through October 31, 1988 be and they hereby are approved.

2. LG&E's proposed base period fuel cost of 14.22 mills per KWH be and it hereby is approved.

3. The rates in Appendix A are fair, just, and reasonable and are approved for service rendered by LG&E on and after July 1, 1989.

4. The current base rate of 15.11 mills per KWH shall be used to compute the fuel adjustment clause rate for May 1989.

5. The average base fuel cost of 14.67 mills per KWH shall be used to compute the fuel adjustment clause rate for June 1989.

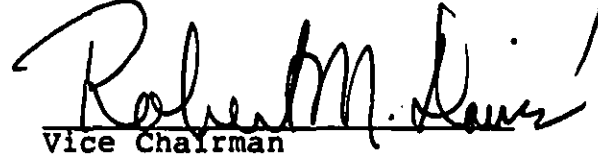
6. The base fuel cost of 14.22 mills per KWH shall be used to compute the fuel adjustment clause rate for July 1989 and succeeding months.

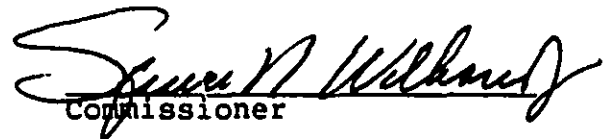
7. Within 30 days from the date of this Order, LG&E shall file with the Commission its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 31st day of March, 1989.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 10440 DATED 3/31/89

The following rates and charges are prescribed for the customers in the area served by Louisville Gas and Electric Company. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

ELECTRIC SERVICE

RESIDENTIAL RATE (RATE SCHEDULE R)

RATE:

Customer Charge: \$3.25 per meter per month

Winter Rate: (Applicable during 8 monthly billing periods of October through May)

First 600 kilowatt-hours per month	5.934¢ per KWH
Additional kilowatt-hours per month	4.628¢ per KWH

Summer Rate: (Applicable during 4 monthly billing periods of June through September)

All kilowatt-hours per month	6.504¢ per KWH
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WATER HEATING RATE (RATE SCHEDULE WH)

RATE: 4.672¢ per kilowatt-hour

Minimum Bill \$2.05 per month per heater

GENERAL SERVICE RATE* (RATE SCHEDULE GS)

RATE:

Customer Charge:

\$3.85	per meter per month for single-phase service
\$7.70	per meter per month for three-phase service

Winter Rate: (Applicable during 8 monthly billing periods
of October through May)

All kilowatt-hours per month 6.365¢ per KWH

Summer Rate: (Applicable during 4 monthly billing periods
of June through September)

All kilowatt-hours per month 7.143¢ per KWH

Minimum Bill:

The minimum bill for single-phase service shall be the customer charge.

The minimum bill for three-phase service shall be the customer charge; provided, however, in unusual circumstances where annual kilowatt-hour usage is less than 1,000 times the kilowatts of capacity required, Company may charge a minimum bill of not more than 98 cents per month per kilowatt of connected load.

SPECIAL RATE FOR ELECTRIC SPACE HEATING SERVICE
RATE SCHEDULE GS

RATE:

For all consumption recorded on the separate meter during the heating season the rate shall be 4.637¢ per kilowatt-hour.

Minimum Bill:

\$6.90 per month for each month of the "heating season." This minimum charge is in addition to the regular monthly minimum of Rate GS to which this rider applies.

LARGE COMMERCIAL RATE
(RATE SCHEDULE LC)

Applicable:

In all territory served.

Availability:

This schedule is available for alternating current service to customers whose monthly demand is less than 2,000 kilowatts and whose entire lighting and power requirements are purchased under this schedule at a single service location.

RATE:

Customer Charge: \$16.90 per delivery point per month

Demand Charge:

Secondary
Distribution

Primary
Distribution

Winter Rate: (Applicable
during 8 monthly billing
periods of October through
May)

All kilowatts of billing
demand

\$7.25 per KW
per month

\$5.61 per KW
per month

Summer Rate: (Applicable
during 4 monthly billing
periods of June through
September)

All kilowatts of billing
demand

\$10.33 per KW
per month

\$8.42 per KW
per month

Energy Charge:

All kilowatt-hours per month

3.183¢

LARGE COMMERCIAL TIME-OF-DAY RATE

Availability:

This schedule is available for alternating current service to customers whose monthly demand is equal to or greater than 2,000 kilowatts and whose entire lighting and power requirements are purchased under this schedule at a single service location.

RATE:

Customer Charge: \$17.20 per delivery point per month

Demand Charge:

Basic Demand Charge

Secondary Distribution \$3.68 per KW per month

Primary Distribution \$1.99 per KW per month

Applicable to the highest average load in kilowatts recorded during any 15-minute interval in the monthly billing period but not less than 50 percent of the maximum demand similarly determined during any of the 11 preceding months.

Peak Period Demand Charge

Summer Peak Period	\$6.66 per KW per month
Winter Peak Period	\$3.54 per KW per month

Applicable to the highest average load in kilowatts recorded during any 15-minute interval of the peak period, as defined herein, in the monthly billing period, but not less than 50 percent of the maximum demand similarly determined during any of the 11 preceding months.

Energy Charge:

3.183¢ per KWH

Winter-Peak Period is defined as weekdays, except holidays as recognized by company, from 6 a.m. to 10 p.m. local time, during the 8 monthly billing periods of October through May.

INDUSTRIAL POWER
(RATE SCHEDULE LP)

Availability:

This schedule is available for three-phase industrial power and lighting service to customers whose monthly demand is less than 2,000 kilowatts, the customer to furnish and maintain all necessary transformation and voltage regulatory equipment required for lighting usage. As used herein the term "industrial" shall apply to any activity engaged primarily in manufacturing or to any other activity where the usage for lighting does not exceed 10 percent of total usage.

RATE:

Customer Charge: \$41.70 per delivery point per month

Demand Charge:

	<u>Secondary Distribution</u>	<u>Primary Distribution</u>	<u>Transmission Line</u>
All kilowatts of billing demand	\$8.99 per KW per month	\$7.02 per KW per month	\$5.86 per KW per month

Energy Charge:

All kilowatt-hours per month 2.743¢ per KWH

INDUSTRIAL POWER TIME-OF-DAY RATE
(RATE SCHEDULE LP-TOD)

Applicable:

In all territory served.

Availability:

This schedule is available for three-phase industrial power and lighting service to customers whose monthly demand is equal to or greater than 2,000 kilowatts, the customer to furnish and maintain all necessary transformation and voltage regulatory equipment required for lighting usage. As used herein the term "industrial" shall apply to any activity engaged primarily in manufacturing or to any other activity where the usage for lighting does not exceed 10 percent of total usage. Company reserves the right to decline to serve any new load of more than 50,000 kilowatts under this rate schedule.

RATE:

Customer Charge: \$42.55 per delivery point per month

Demand Charge:

Basic Demand Charge:

Secondary Distribution	\$5.26 per KW per month
Primary Distribution	\$3.30 per KW per month
Transmission Line	\$2.10 per KW per month

Applicable to the highest average load in kilowatts recorded during any 15-minute interval in the monthly billing period, but not less than 70 percent of the maximum demand similarly determined for any of the four billing periods of June through September within the 11 preceding months; nor less than 50 percent of the maximum demand similarly determined during any of the 11 preceding months.

Peak Period Demand Charge:

Summer Peak Period	\$5.51 per KW per month
Winter Peak Period	\$2.92 per KW per month

Applicable to the highest average load in kilowatts recorded during any 15-minute interval of the peak period, as defined herein, in the monthly billing period, but not less than 70 percent of the maximum demand similarly determined for any of the four billing periods of June through September within the 11 preceding months; nor less than 50 percent of the maximum demand similarly determined during any of the 11 preceding months.

Energy Charge: 2.743¢ per KWH

Summer-Peak Period is defined as weekdays, except holidays as recognized by Company, from 9 a.m. to 11 p.m. local time, during the 4 monthly billing periods of June through September.

Winter-Peak Period is defined as weekdays, except holidays as recognized by Company, from 6 a.m. to 10 p.m. local time during the 8 monthly billing periods of October through May.

Power Factor Provision

The monthly demand charge shall be decreased .4 percent for each whole one percent by which the monthly average power factor exceeds 80 percent lagging and shall be increased .6 percent for each whole one percent by which the monthly average power factor is less than 80 percent lagging.

OUTDOOR LIGHTING SERVICE
(RATE SCHEDULE OL)

RATES:

<u>Overhead Service</u> <u>Mercury Vapor</u>	<u>Rate Per Light</u> <u>Per Month</u>
100 watt*	\$6.88
175 watt	7.82
250 watt	8.90
400 watt	10.90
400 watt floodlight	10.90
1000 watt	20.06
1000 watt floodlight	20.06
<u>High Pressure Sodium Vapor</u>	
150 watt	\$9.83
150 watt floodlight	9.83
250 watt	11.64
400 watt	12.40
400 watt floodlight	12.40
<u>Underground Service</u> <u>Mercury Vapor</u>	
100 Watt - Top Mounted	\$11.96
175 Watt - Top Mounted	12.76
<u>High Pressure Sodium Vapor</u>	
100 Watt - Top Mounted	\$14.09

* Restricted to those units in service on 5-31-79.

Special Terms and Conditions:

Company will furnish and install the lighting unit complete with lamp, fixture or luminaire, control device and mast arm. The above rates for overhead service contemplate installation on an existing wood pole with service supplied from overhead circuits only; provided, however, that when possible, floodlights served hereunder may be attached to existing metal street lighting standards supplied from overhead service. If the location of an existing pole is not suitable for the installation of a lighting unit, the Company will extend its secondary conductor one span and install an additional pole for the support of such unit. The customer to pay an additional charge of \$1.62 per month for each such pole so installed. If still further poles or conductors are required to extend service to the lighting unit, the customer will be required to make a non-refundable cash advance equal to the installed cost of such further facilities.

PUBLIC STREET LIGHTING SERVICE (RATE SCHEDULE PSL)

RATE:

<u>TYPE OF UNIT</u>		<u>Rate Per Light Per Year</u>
<u>Overhead Service</u>	<u>Support</u>	
100 Watt Mercury Vapor (open bottom fixture)(1)	Wood Pole	\$74.12
175 Watt Mercury Vapor	Wood Pole	87.29
250 Watt Mercury Vapor	Wood Pole	99.67
400 Watt Mercury Vapor	Wood Pole	119.81
400 Watt Mercury Vapor (2)	Metal Pole	172.38
400 Watt Mercury Vapor Floodlight	Wood Pole	119.81
1000 Watt Mercury Vapor	Wood Pole	224.49
1000 Watt Mercury Vapor Floodlight	Wood Pole	224.49
150 Watt High Pressure Sodium	Wood Pole	106.65
150 Watt High Pressure Sodium Floodlight	Wood Pole	106.65
250 Watt High Pressure Sodium	Wood Pole	128.24

400 Watt High Pressure Sodium	Wood Pole	134.44
400 Watt High Pressure Sodium Floodlight	Wood Pole	134.44
<u>Underground Service</u>		
100 Watt Mercury Vapor Top Mounted		121.20
175 Watt Mercury Vapor Top Mounted		132.99
175 Watt Mercury Vapor	Metal Pole	178.93
250 Watt Mercury Vapor	Metal Pole	191.80
400 Watt Mercury Vapor	Metal Pole	226.45
400 Watt Mercury Vapor on State of KY Aluminum Pole		135.50
100 Watt High Pressure Sodium Top Mounted		133.21
250 Watt High Pressure Sodium Vapor	Metal Pole	244.36
250 Watt High Pressure Sodium Vapor on State of KY Aluminum Pole		126.07
400 Watt High Pressure Sodium Vapor	Metal Pole	263.12
1500 Lumen Incandescent (3)	8-1/2' Metal Pole	98.65
6000 Lumen Incandescent (3)	Metal Pole	130.92
(1) Restricted to those units in service on 5/31/79		
(2) Restricted to those units in service on 1/19/77		
(3) Restricted to those units in service on 3/1/67		

STREET LIGHTING ENERGY RATE
(RATE SCHEDULE SLE)

RATE:

3.932¢ per kilowatt-hour

TRAFFIC LIGHTING ENERGY RATE
(RATE SCHEDULE TLE)

RATE:

5.238¢ per kilowatt-hour

Minimum Bill:

\$1.45 per month for each point of delivery

INTERRUPTIBLE SERVICE

Applicable:

To Large Commercial Rate LC, Rate LC-TOD, Industrial Power Rate LP and Rate LP-TOD.

Availability:

This rider is available for interruptible service to any customer whose interruptible demand is at least 1,000 kilowatts.

Contract Demand:

The contract shall be for a given amount of firm demand which shall be billed at the appropriate standard rate schedule demand charge. Any excess monthly demands above this firm demand shall be considered as interruptible demand.

Rate:

The monthly bill for service under this rider shall be determined in accordance with the provisions of Rate LC, Rate LC-TOD, Rate LP or Rate LP-TOD, except there shall be an interruptible demand credit determined in accordance with one of the following categories of interruptible service:

<u>Interruptible Service Categories</u>	<u>Maximum Annual Hours of Interruption</u>	<u>Monthly Demand Credit (\$/KW/Mo)</u>
1	150	1.18
2	200	1.57
3	250	1.94

The interruptible demand credit shall be applied to the monthly billing demand in excess of the firm contract demand (but not less than 1,000 kilowatts) determined in accordance with the billing demand provision under the applicable rate schedule, except in the case of service under Rate LC-TOD or Rate LP-TOD. The interruptible credit shall be applied to the billing demands as determined for the peak periods only.

Interruption of Service:

The Company will be entitled to require customer to interrupt service at any time and for any reason upon providing at least 10 minutes prior notice. Such interruption shall not exceed 10 hours duration per interruption.

Penalty for Unauthorized Use:

In the event customer fails to comply with a Company request to interrupt either as to time or amount of power used, the customer shall be billed for the monthly billing period of such occurrence at the rate of \$15.00 per kilowatt of monthly billing demand. Failure to interrupt may also result in the termination of the contract.

Term of Contract:

The minimum original contract period shall be 1 year and thereafter until terminated by giving at least 6 months previous written notice, but Company may require that contract be executed for a longer initial term when deemed necessary by the size of the load or other conditions.

Applicability of Terms:

Except as specified above, all other provisions of Rate LC, Rate LC-TOD, Rate LP and Rate LP-TOD shall apply.

SUPPLEMENTAL OR STANDBY SERVICE

Applicable:

To Large Commercial Rate LC, Rate LC-TOD, Industrial Power Rate LP and Rate LP-TOD.

Rate:

Electric service actually used each month will be charged for in accordance with the provisions of the applicable rate schedule; provided, however, that the monthly bill shall in no case be less than an amount calculated at the rate of \$5.61 per kilowatt applied to the contract demand.

Special Terms and Conditions:

d. In the event customer's use of service is intermittent or subject to violent fluctuations, the Company will require customer to install and maintain at his own expense suitable equipment to satisfactorily limit such intermittence or fluctuations.

SMALL POWER PRODUCTION AND COGENERATION
PURCHASE SCHEDULE
SPPC-1

Rates for Purchases from
Qualifying Facilities

Capacity component per kilowatt-hour delivered .415¢

Term of Contract:

For contracts which cover the purchase of energy only, the term shall be 1 year and shall be self-renewing from year to year thereafter, unless cancelled by either party on 1 year's written notice.

For contracts which cover the purchase of capacity and energy, the term shall be 20 years.

SMALL POWER PRODUCTION AND COGENERATION
PURCHASE SCHEDULE
SPPC-II

Rates for Purchases from
Qualifying Facilities

Capacity component per kilowatt-hour delivered .415¢

Term of Contract:

For contracts which cover the purchase of energy only, the term shall be 1 year and shall be self-renewing from year to year thereafter, unless cancelled by either party on 1 year's written notice.

For contracts which cover the purchase of capacity and energy, the term shall be 20 years.

SPECIAL CONTRACT FOR ELECTRIC SERVICE
ARICO ALLOYS AND CARBIDE SPECIAL CONTRACT

Demand Charge

Primary Power (28,500 KW)	\$11.37 per KW per month
Secondary Power (Excess KW)	\$5.69 per KW per month
Demand Credit for Primary Interruptible Power (24,500 KW)	\$1.94 per KW per month
Energy Charge All KWH	1.916¢ per KWH

SPECIAL CONTRACT FOR ELECTRIC SERVICE
E. I. DUPONT DE NEMOURS SPECIAL CONTRACT

Demand Charge

\$11.02 per KW of billing demand per month

Energy Charge

2.039¢ per KWH

SPECIAL CONTRACT FOR ELECTRIC SERVICE
FORT KNOX SPECIAL CONTRACT

Demand Charge

Winter Rate:
(Applicable during 8 monthly billing periods of October through May)

All KW of Billing Demand	\$6.24 per KW per month
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Summer Rate:
(Applicable during 4 monthly billing periods of June through September)

All KW of Billing Demand	\$8.42 per KW per month
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Energy Charge: All KWH per month	2.653¢ per KWH
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SPECIAL CONTRACT FOR ELECTRIC SERVICE
LOUISVILLE WATER COMPANY SPECIAL CONTRACT

Demand Charge

\$7.53 per KW of billing demand per month

Energy Charge

2.172¢ per KWH

GENERAL RULES

Charge for Disconnecting and Reconnecting Service:

23. A charge of \$14.00 will be made to cover disconnection and reconnection of electric service when discontinued for non-payment of bills or for violation of the Company's rules and regulations, such charge to be made before reconnection is effected. If both gas and electric services are reconnected at the same time, the total charge for both services shall be \$14.00.

Residential and general service customers may request and be granted a temporary suspension of electric service. In the event of such temporary suspension, Company will make a charge of \$14.00 to cover disconnection and reconnection of electric service, such charge to be made before reconnection is effected. If both gas and electric services are reconnected at the same time, the total charge for both services shall be \$14.00.